

State of Utah

GARY R. HERBERT Governor

SPENCER J. COX Lieutenant Governor

Department of **Environmental Quality**

Alan Matheson Executive Director

DIVISION OF WATER QUALITY Walter L. Baker, P.E. Director



RECEIVED E-Mail

Div. of Oil, Gas & Mining

MAY 2 4 2016

Ken Ezpeleta Environmental Engineer Lisbon Valley Mine 920 South County Road 313 La Sal, UT 84530

Dear Ken:

Subject:

Underground Injection Control (UIC) Review of 'Preliminary Draft Baseline

Hydrologic Study Plan for the Lower Lisbon Valley Area'; Lisbon Valley Mining

Company; San Juan County

On Tuesday May 10, Dan Hall, Keith Eagan, and Candace Cady of the Utah Division of Water Quality (DWQ) met with representatives of Lisbon Valley Mining Company (LVM) to discuss LVM's plans for investigating the possible expansion of their copper mine by conventional open pit operations, in-situ recovery (ISR), or a combination of the two. At the meeting LVM submitted the subject document to DWQ requesting that we provide feedback based on regulatory requirements of the Ground Water Protection Program for expansion of the existing conventional open pit operations and the UIC Program for implementation of a new Class III injection well operation for in-situ recovery of copper. The following review is for the option involving Class III injection wells for insitu recovery.

Given the complexity of the geologic structure in Lower Lisbon Valley as depicted in Figures 2, 3, and 4 and the distance between the proposed monitoring wells as shown on Figure 10 of the subject document, it is unlikely that the proposed baseline hydrologic study would provide sufficient resolution to demonstrate adequately hydraulic control in support of an aquifer exemption request or a UIC Class III permit application.

We highly recommend that LVM refer to permitting documents associated with the Florence Copper In-Situ Copper Recovery project in Arizona to gain an understanding of the detail required in preparing a successful application package supporting the timely issuance of a UIC Class III permit. As of this writing, the Arizona Department of Environmental Quality, Water Quality Division is in the process of issuing an Individual Aquifer Protection Permit to Florence Copper, supporting documents for which are available here: http://www.azdeq.gov/environ/water/permits/. USEPA Region 9 is preparing to issue its UIC Class III permit, permitting materials are available here: https://www.epa.gov/uic/uic-permit-materials-florence-copper-inc and permit application materials are available here: https://www.epa.gov/uic/uic-permit-application-materials-florence-copper-inc-fci .

If you have any questions, please contact Candace Cady at 801.536.4352 or ccady@utah.gov.

Sincerely,

Candace C. Cady, P.G.
Environmental Scientist

Underground Injection Control (UIC) Program

CCC:ag

Cc: Mr. Mike Bradley, DOGM

Utah Southeast Health Department Utah DEQ Southeast District Engineer